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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/699,205	10/31/2003	Scott J. Smith	5003073-048US1	2786

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EXAMINER	
SASTRI, SATYA B	
ART UNIT	**PAPER NUMBER**
1713	

DATE MAILED: 03/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/699,205	SMITH ET AL.	
	Examiner	Art Unit	
	Satya B. Sastri	1713	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 December 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-32* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-32* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *31 October 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *12/23/05*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This office action is in response to amendment filed on December 15, 2005. ***Claims 1-32*** are now pending in the application. In view of the amendment and arguments, rejections of ***claims 1-32*** under 35 U.S.C. 103(a) as being unpatentable over Harada et al. (EP 0827753 A2) or Choi et al. (US 5,032,628) individually, in view of Nagata et al. (US 5,567,744) are sustained and all other rejections are withdrawn. Additionally, new grounds of rejections are introduced in this action.

Double Patenting

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington,* 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. ***Claims 1-32*** are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-46 of copending application 11/301,359 to McIntosh et al. and claims 1-14, 23, 25-28, 31-32, 34-37, 46-62 of copending application 11/153,190 to Qin et al. (published as US2005/056469A1). Although the conflicting claims are not identical, the compositions and properties as recited in the instant claims overlap in scope with the copending claims.

4. The U.S. Patent and Trademark Office normally will not institute an interference between applications or a patent and an application of common ownership (see MPEP § 2302). Commonly assigned 11/301,359 and 11/153190 discussed above, would form the basis for a rejection of the noted claims under 35 U.S.C. 103(a) if the commonly assigned case qualifies as prior art under 35 U.S.C. 102(e), (f) or (g) and the conflicting inventions were not commonly owned at the time the invention in this application was made. In order for the examiner to resolve this issue, the assignee can, under 35 U.S.C. 103(c) and 37 CFR 1.78(c), either show that the conflicting inventions were commonly owned at the time the invention in this application was made, or name the prior inventor of the conflicting subject matter.

A showing that the inventions were commonly owned at the time the invention in this application was made will preclude a rejection under 35 U.S.C. 103(a) based upon the commonly

assigned case as a reference under 35 U.S.C. 102(f) or (g), or 35 U.S.C. 102(e) for applications filed on or after November 29, 1999.

5. ***Claims 1-32*** are directed to an invention not patentably distinct from claims 1-4 and claims 1-14, 23, 25-28, 31-32, 34-37, 46-62 of commonly assigned 11/301,359 to McIntosh et al. and 11/153,190 to Qin et al. (published as US2005/056469A1), respectively. Specifically, the compositions and properties as recited in the instant claims overlap in scope with the copending claims.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 1-32 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is noted that instant claims lack clarity for component (d) i.e. penetration modifiers. Instant specification discloses thermoplastic resin, polyethylene glycol, surfactant etc as penetration modifiers (paragraph 0029 of PGPUB). It is noted that (d) may be the same as (f) or (h).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9. ***Claims 1-32*** are rejected under 35 U.S.C. 103(a) as being unpatentable over either Kajikawa et al. (US 6,716,894 B2) or Nagasuna et al. (US 2003/018115 A1) in view of either Engelhart et al. (US 5,731,365) or Ball et al. (WO/9118042) or Mukaida et al. (EP 0612533 B1).

Prior art to Kajikawa et al. concerns water absorbing resin powder having a mass average particle diameter of 300-600 microns (abstract). The water absorbing resins are obtained by polymerizing acrylic acid or its salt with a crosslinking agent. The internal crosslinking agent may range from 0.001 to 2 mole% (column 7, lines 30-67, column 8, lines 1-17). Surface crosslinking may be accomplished as disclosed in cited references and preferably by using a polyhydric alcohol (column 20, lines 35, 55-58). The compositions may include fine particles of silicon dioxide (column 11, lines 37-52) and the surface may be further modified with surfactants, hydrophilic polymers such as polyethylene glycerol, polyethylenimine, hydrophobic polymers, thermoplastic ad thermosetting resins etc. Such resins may be present in amounts of 0 to 10 parts by wt. (column 11, lines 52-67).

Nagasuna et al. disclose an absorbent structure comprising crosslinked water absorbent resin (page 8, paragraphs 0016-0018), 0.001-5 parts by wt. of surface crosslinking agent (page 9,

paragraph 0124). Disclosed surface crosslinking agents include multivalent metallic compounds. Additionally, polyhydric alcohols such a polyethylene glycols may be mixed with surface crosslinking agents (column 9, paragraph 012). Finely divided inorganic compounds may be mixed with the resin in amounts less than 10% by wt. (page 10, paragraph 0130).

The difference between the prior art and the instant invention is that the prior art does not teach or suggest thermoplastic resins in the water absorbent compositions.

Secondary reference to Engelhart et al. discloses hydrogels (column 4, lines 45-55, column 5, lines 40-54) which are coated with insoluble film-forming polymers (abstract, column 2. Lines 66-67, column 3 and 4). Coating hydrogels with such polymers may result in dust-free abrasion resistant highly swellable polymer (column 1, lines 40-45). Thus, it would have been obvious to one skilled in the art at the time the invention was to coat water absorbent resin of Kajikawa et al. or Nagasuna et al. by insoluble film-forming polymers and thereby obtain the instant invention. The properties recited in the instant claims must intrinsically be present in the resultant product. The prior art to Engelhart et al. does not teach applying the thermoplastic resin in the melt phase. However, instant claims are composition claims and it is the examiner's position that the combined teachings would render the compositions obvious to one skilled in the art, absent evidence to the criticality of the melt phase application.

Secondary reference to Ball et al. discloses water absorbent resin rendered adhesive by incorporating a thermoplastic polymer with a hydrophilic character (abstract). 1-3 parts of the thermoplastic resin may be used for 100 parts of absorbent polymer (page 13, lines 7-13). The absorbent resin may be blended with the adhesive under ambient or elevated temperatures as long as the temperatures are not detrimental to the material (page 15, lines 5-14). The adhesives

disclosed in this reference can effectively hold the resin at the desired parts within the absorbent structure. Thus, it would have been obvious to one skilled in the art at the time the invention was made to include thermoplastic adhesive on the surface of water absorbent resin and thereby obtain the instant invention. The properties as recited in the instant claims must intrinsically be present in the resultant product.

Secondary reference to Mukaida et al. disclose a water absorbent composition comprising water absorbent polymer particles (A), fiber and resin powder (B) comprising polyolefin modified with carboxylic acid used in amounts of 0.5 to 30 parts by wt. per 100 parts of water absorbent polymer (page 3, lines 0010, 0011, 0015). Resin powder (B) exhibits heat adhesion property at 50-200°C. The two components may be mixed in the form of powders or elevated temperature mixing provides for homogeneity and adhesion of the particles to the fiber (page 5, 0027, 0028). Coating the water absorbent resin (A) with resin (B) affords excellent fixation of the absorbent to the fibers and shape retention (page 3, paragraph 0009). Thus, it would have been obvious to one skilled in the art at the time the invention was made to include thermoplastic adhesive on the surface of water absorbent resin and thereby obtain the instant invention. The properties as recited in the instant claims must intrinsically be present in the resultant product.

Response to Arguments

10. Applicants argue that Harada et al. require surface treating temperature of 20 to 80°C while the secondary reference to Nagata et al. teach surface coating with resins that have a softening point of 40-200 °C and that the examples disclose distilling off the solvent at 100 °C. It

is noted that there is overlap in the temperature ranges taught by both the references and the working example in Harada et al. is only a preferred embodiment of the disclosure. With regard to Choi et al. as the primary reference, applicants argue that the particle size of 100-150 microns of Choi et al. is outside of the scope of the CRC and GBP tests measurement. However, the arguments are not found persuasive because these properties are intrinsic to the material. It is the examiner's position that if the composition as recited in the claims is taught by the combination of references, the composition must intrinsically have the CRC and GBP properties when obtained in the particle size range of 300-600 microns as used in the instant invention.

Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Satya Sastri at (571) 272 1112.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached at (571) 272 1114.

The fax phone number for the organization where this application or proceeding is assigned is (571) 273 8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SATYA SASTRI

February 24, 2006

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